



MULTI-MEDIA ENVIRONMENTAL COMPLIANCE CONTRACT TRANSMITTAL MEMORANDUM

Contract No. N-68711-00-D-0004

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TO: Contracting Officer
Naval Facilities Engineering Command
1220 Pacific Highway
San Diego, CA 92132-5190

DATE: 11/19/04
D.O. #: 0069
LOCATION: MCAS El Toro

Attention: Gracy Tinker

FROM: Bob Coleman

Bob Coleman
Project Manager

DESCRIPTION: MCAS El Toro Restoration Advisory Board Meeting Mailer - RAB Meeting Agenda and Public Notice for 12/1/04 RAB Meeting and RAB Meeting Minutes and Attachments from the 9/29/04 RAB Meeting - Dated 12/1/04

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DTSC
NOV 22 2004
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**Former MCAS El Toro
Restoration Advisory Board**

*Irvine City Hall
Conference and Training Center
One Civic Center Plaza, Irvine*

**December 1, 2004
6:30 - 9:00 p.m.
72nd RAB Meeting**

**RAB Subcommittee Meeting
5:00-6:00 p.m., Room L-104**

AGENDA

RAB members that are unable to attend please call either Andy Piszkin, Marine Corps/Navy RAB Co-Chair at (949) 726-5398 or (619) 532-0784 -or- Bob Woodings, RAB Community Co-Chair at (949) 461-3481.

Question and Answer (Q&A) Ground Rules

- Q&A follows individual presentations; time designated for presentations includes Q&A time.
- "Open Q&A" session (environmental topics) is at the end of the New Business segment.
- After adjournment, Marine Corps/Navy representatives are available to answer more questions.

Welcome/Introductions/Agenda Review (6:30-6:40)

Andy Piszkin
Marine Corps/Navy RAB Co-Chair

Old Business (6:40-7:15)

Approval of 9/29/04 Minutes (6:40-6:45)

Bob Woodings
RAB Community Co-Chair

Announcements/Review of Action Items (6:45-7:00)
- Irvine Desalter Project Update

Andy Piszkin & Bob Woodings

Subcommittee Meeting Report (7:00-7:10)

Marcia Rudolph
RAB Subcommittee Chair

Follow-up Announcements/Responses/Q&A (7:10-7:25)

Andy Piszkin

New Business (7:25-8:50)

Regulatory Agency Comment Update (7:25-7:35)
*Federal and State Regulatory Oversight of Environmental
Restoration and Cleanup at MCAS El Toro*

Federal Rep
Richard Muza
U.S. EPA

State Rep
Tayseer Mahmoud
Cal/EPA DTSC

▪ Long-Term Aquifer Test at Site 2, Magazine Road Landfill –
(7:35-8:15)

Gordon Brown
Navy/SWDIV

Steve Williams
Earth Tech

- Overview of the groundwater investigation at Site 2 landfill to determine the lateral and vertical extent of contaminants and the unique characteristics of the aquifer.

BREAK – 10 minutes

▪ Stormwater Mitigation Measures during Remedial Actions –
(8:25-8:45)

Gordon Brown
Navy/SWDIV

- Overview of procedures used to minimize surface runoff from storm events with a brief presentation of recent storm events at Sites 2 and 17 landfills.

Open Q&A (Environmental Topics) (8:45-8:55)

Andy Piszkin

Meeting Summary & Closing (8:55-9:00)

Andy Piszkin & Bob Woodings

Meeting Evaluation & Topic Suggestions for Future Meetings

P U B L I C N O T I C E

***FORMER
MARINE CORPS AIR STATION EL TORO***

Restoration Advisory Board Meeting

Restoration Advisory Board (RAB) meetings provide community members and the general public a first-hand opportunity to learn more about the environmental cleanup of former MCAS El Toro. Project managers from the Navy and the regulatory agencies make presentations and are available to answer your questions. Since 1994, concerned citizens and government representatives have been regularly meeting to discuss the environmental cleanup program. Your input is encouraged and appreciated.

72nd Meeting

Wednesday, December 1, 2004 – 6:30-9:00 p.m.

**Irvine City Hall, Conference and Training Center
One Civic Center Plaza, Irvine**

This RAB/Public meeting will feature the following presentations specific to Former MCAS El Toro:

- **Long-Term Aquifer Test at Site 2, Magazine Road Landfill**
Overview of the groundwater investigation at Site 2 landfill to determine the lateral and vertical extent of contaminants and the unique characteristics of the aquifer.
- **Stormwater Mitigation Measures during Remedial Actions**
Overview of procedures used to minimize surface runoff from storm events with a brief presentation of recent storm events at Sites 2 and 17 landfills.

For more information about Environmental Programs at Former MCAS El Toro, please contact:

**Base Realignment and Closure, Mr. Andy Piszkin, BRAC Environmental Coordinator,
7040 Trabuco Road, Irvine, CA 92618 – (949) 726-5398 or (619) 532-0784**

FORMER MARINE CORPS AIR STATION EL TORO

RESTORATION ADVISORY BOARD MEETING

September 29, 2004

MEETING MINUTES

The 71st Restoration Advisory Board (RAB) meeting for Marine Corps Air Station (MCAS) El Toro was held Wednesday, September 29, 2004 at the Irvine City Hall. The meeting began at 6 37 p.m. These minutes summarize the discussions and presentations from the RAB meeting

WELCOME, INTRODUCTIONS, AGENDA REVIEW

Mr. Andy Piszkin, BRAC Environmental Coordinator (BEC) for MCAS El Toro and Marine Corps RAB Co-Chair, stated he had not received any notices of excused absences from RAB members. The next RAB meeting is scheduled for Wednesday, December 1, 2004. Mr. Piszkin asked Ms. Marcia Rudolph, RAB Subcommittee Chair, to lead the Pledge of Allegiance. He then asked for self-introductions and reviewed the agenda for tonight's meeting. The key presentations this evening will cover the Radiological Release Reports for landfill Sites 2 and 17, Site 8 (Units 2, 3, and 5) at the former Defense Reutilization and Marketing Office (DRMO) Storage Yard, and Site 25 (Bee Canyon Wash Outfall) and an overview of remedial investigation activities at Site 1, the former Explosives Ordnance Disposal (EOD) Range

Review and Approval of the July 28, 2004 RAB Meeting Minutes

Mr. Bob Woodings, RAB Community Co-Chair, in regard to the July 28, 2004 RAB meeting minutes, asked for changes or comments. The minutes were approved without amendment as submitted. He stated his appreciation for the high quality of the meeting minutes and the effort that goes into preparing them

Announcements

- Mr. Steven Malloy, RAB member representing the Irvine Ranch Water District (IRWD), made a brief presentation on the Irvine Desalter Project. He said the Navy has not yet approved the 60 percent design submittal for the nonpotable portion of the project, Site 18 remediation. He mentioned that there have been some technical changes and refinements proposed that require approval from the Navy and the BRAC Cleanup Team. On the potable side of the project, the drinking water source, IRWD has drilled all the wells. The property that is needed for a key portion of the potable system site has been purchased from The Irvine Company. Mr. Piszkin said the 90 percent design submittal is scheduled to be presented to the BCT in October 2004. He clarified that the technical adjustments to the engineering components are undergoing Navy review. However, the Navy is not the lead agency when it comes to Settlement Agreement issues. Technical adjustments must meet with the approval of the Department of Justice, which represents the federal government on any proposed changes to the Irvine Desalter Project agreement. He does not anticipate any unresolved issues resulting from the Department of

Justice, but timing may be a factor; construction of extraction wells and piping associated with the shallow groundwater unit is expected to proceed.

Mr. Piszkin provided a summary of the ongoing environmental restoration activities at MCAS El Toro Installation Restoration Program sites.

- Sites 2 and 17, Magazine Road and Communication Station Landfills – Before the remedial design is finalized, a test pad will be constructed. The test pad will encompass a 40-foot by 100-foot area and consist of a pilot test cap of what will be built on the landfill. A work plan will first be prepared and approved. Earth Tech, Inc. has done the design, and they will also construct the test pad which will occur next year. Also, off-station groundwater wells have been installed downgradient of Site 2. Information obtained from these wells will be added to the depth of groundwater information already obtained for the area. This will result in a November 2004 submittal of a draft aquifer test report. The draft report will help determine groundwater conditions in the aquifer and in examining the best methods for dealing with any contaminated groundwater.
- Radiological Release Reports – The Radiological Release Reports are being developed for the agencies to review. The draft Radiological Release Report associated with Sites 8, 12, and 25 has been reviewed by U.S. EPA and Cal/EPA and there are no comments. Mr. Piszkin stated that the agencies and the Navy's contractors worked closely together on this effort. He specifically said that Bruce Christensen of Weston Solutions, Steve Dean of U.S. EPA, Deirdre Dement of the California Department of Health Services, and Pat Hannon of the Navy's Radiological Affairs Support Office (RASO) all pulled together on this difficult task. A key result is the establishment of a template for all remaining "mini" radiological release reports. Progress on several projects at former MCAS El Toro have been on hold waiting for mini reports to be completed and approved, including the Sites 3 and 5 landfills which are progressing with a feasibility study addendum due out next spring.
- Site 16, Crash Crew Pit No. 2 (Fire Fighting Pit) – Installation of new monitoring wells was recently completed during August and September 2004. Samples were collected and low levels of volatile organic compounds (VOCs) were detected in groundwater at depths ranging from 160 to 200 feet below the ground surface. Further sampling as part of the Monitored Natural Attenuation Remedy will continue in March 2005.
- Sites 8 and 12, Defense Reutilization and Marketing Office (DRMO) and Sludge Drying Beds and Site 11, Transformer Storage Area – The Non-Time Critical Removal Action will now proceed with the completion of the Radiological Release Report for Sites 8 and 12. Work has begun on the Action Memorandum for the Sites 8 and 12 removal action. It will consist of a plan to excavate the contaminated soil and haul it away for disposal at a certified disposal facility. This work will be coordinated with the remedial action for Site 11 and is scheduled to start in spring 2005.
- Sites 18 and 24, Regional Volatile Organic Compound (VOC) Groundwater Plume and VOC Source Area – The 90 Percent Design Submittal for the on-station Site 24 is currently under development with that design being coordinated with the Irvine Ranch Water District and the Orange County Water District. The 90 Percent Design Submittal for the off-station portion of the project (Site 18) is scheduled for submittal for regulatory agency review later this year. Construction is to begin in 2005.

- RAB Rule – In regard to the “RAB Rule,” there is nothing new to report. Mr. Piszkin said he would continue to keep the RAB informed on this issue
- Updated Community Relations Plan (CRP) – The draft document was issued today to the BCT for a 60-day review period. The RAB Community Co-Chair and the RAB Subcommittee Chair will also receive copies of the draft plan. Mr. Piszkin said that Bob Coleman is ghost author. The plan explains historical aspects of the community relations program, community relations requirements, and what activities will continue to be done in the future. The plan also contains results of the surveys and interviews conducted as well as suggestions offered during the interviews. Mr. Piszkin said that overall not much needs changing; it shows that community relations efforts remain on target and that the community knows about MCAS El Toro.
- El Toro Bidder Alert – Mr. Piszkin said that an anonymous flyer, with a Santa Ana postmark, was recently received at the El Toro Bidder Support Office which was also sent out to potential bidders of former MCAS El Toro property. It contained confusing and accusatory information about perchlorate, environmental efforts at former MCAS El Toro, and the Navy’s environmental program in general. The Navy will post a response to the anonymous flyer on the Heritage Fields web site.
- Mr. Piszkin showed an overhead on RAB meeting attendance. He said that July is typically the low turnout month because of vacations. Attendance is tracked for each meeting and is included in the RAB meeting minutes.
- Mr. Piszkin presented the RAB meeting schedule through July 2005. A copy of the schedule is also available on the information table.
- Mr. Piszkin explained that there is a handout on the information table listing all the MCAS El Toro project representatives along with information on the Administrative Record File at MCAS El Toro and Information Repository at the Heritage Park Regional Library.
- Mr. Piszkin said the MCAS El Toro Information Repository, located at the Heritage Park Regional Library in Irvine, will be updated tomorrow with the most recent project documents.

RAB Subcommittee Meeting Report, Ms. Marcia Rudolph, RAB Subcommittee Chair

Ms. Rudolph reviewed the key points discussed in the RAB Subcommittee meeting:

- Regarding the Radiological Release Report for landfill Sites 2 and 17, the RAB Subcommittee is concerned that this is not a stand-alone document. With the importance those on the RAB Subcommittee gave this issue for the past 7 to 8 years, it was expected that this information would have not just been incorporated into another document; the RAB Subcommittee was looking forward to a stand-alone document.
- There are concerns on what was done with the radiological anomalies after excavation. Also, a concern is that if an additional survey was done at the point of anomaly removal after the excavation was completed.
- Ms. Rudolph said that storm water issues involving NPDES (National Pollutant Discharge Elimination System) TMDLs (total maximum daily limits) is a huge issue with the Santa Ana and San Diego permit units of the Regional Water Quality Control Board. The RAB

Subcommittee needs to know what the Navy is doing to prepare for this. Specifically, what is being done to keep storm water on the base or on the site, instead of letting it go down washes that traverse the base?

- The RAB Subcommittee discussed the fencing material around Sites 3 and 5. The RAB Subcommittee is interested to know if there is a possibility that the City of Irvine or the Great Park developers could upgrade the fence from chain link and razor wire, and possibly get credited for the cost of a cheaper material.
- Perchlorate at Site 1 is still a key interest of the RAB Subcommittee.
- The RAB Subcommittee wants to know if the background level used for the radiological studies is still in a safe range.
- In regard to Site 24 VOC Source Area, the Site 18 Regional ICE plume, and perchlorate plumes – are there benchmarks to assess the cleanup and where things stand as far as effectiveness of the cleanup? These are necessary to make sure the cleanup is on track and not taking longer than expected. Also, are there provisions for considering the possibility of new and better ways to cleanup these contaminants if such methods become viable? Overall, the RAB Subcommittee wants to know about such benchmarks.

Navy Responses to Subcommittee Comments

- Mr. Piszkin said that the reporting of the Sites 2 and 17 Radiological Release information was standardized in such a way to report the important parts of the analysis, which would then be incorporated into the Sites 2 and 17 Remedial Design document as a condition noted in the Record of Decision. As such, it was not intended to be a stand-alone document.
- Regarding the excavated radiological anomalies, this can best be explained by Mr. Bruce Christensen of Weston Solutions. However, after the anomalies were removed, these areas were reexamined and resurveyed with the same instrumentation that was previously used.
- The issue of background in regard to radioactive isotopes is relative and unique to specific areas of the country. Mr. Christensen can provide more on this during his presentation.
- Mr. Piszkin said regarding the storm water permit on FOST property at MCAS El Toro, he would need to get back to the RAB on this issue since the El Toro permit was closed after operations ceased back in 1999.
- About fencing of the landfills, Mr. Piszkin said that it will be a while until the engineering controls at landfill Sites 3 and 5 are considered and it will be open to discussion with the regulatory agencies. Fencing is to control access to the landfill to prevent damage to the landfill remedy. There could be a low barrier that prevents access, for example, to keep golf carts from driving onto the caps. Mr. Gordon Brown, Navy/SWDIV Remedial Project Manager, said from a CERCLA perspective, it would be necessary to have signage stating that the caps are a restricted area where digging is prohibited. Mr. Piszkin said there is time to consider such adjustments with the remedy.
- Perchlorate at Site 1 is being further investigated with additional groundwater sampling to determine if this contaminant is migrating from the site. Monitoring wells installed between Site 1, the perchlorate source area, and Site 2 are being sampled to determine if there is any connection between those two sites.

- Mr. Piszkin said that every 5 years, there is a reassessment of remedial actions. This is a requirement of Superfund and will be implemented at MCAS El Toro Installation Restoration Program sites. The purpose is to determine if the cleanup is on track and, if needed, adjustments will be made. This includes examining if there are new technologies that could be used to improve upon the cleanup underway. He reiterated that every 5 years the Navy is responsible for checking on the remedy.
- Mr. Piszkin added there has been a shift in contracts for providing RAB and other community relations support. However, Bob Coleman will continue to support the MCAS El Toro RAB meetings.

Discussion

Dr. Michael Brown, consultant to the City of Irvine asked about the TMDLs. Mr. Crispin Waynoike, Earth Tech, Inc. said that TMDLs are only considered when the station was operational and since there are no military operations or activities underway, there are no specific storm water requirements that pertain. Mr. Piszkin said he would follow up on this issue and will find out if there is any part of the permit that is still a requirement.

NEW BUSINESS

♦ Regulatory Agency Comment Update

Nicole Moutoux, Project Manager, U.S. Environmental Protection Agency (U.S. EPA) Region IX

Ms. Moutoux stated that she has two letters available on the information table this evening. She explained that she will update the RAB on what U.S. EPA has been doing since the last RAB meeting on July 28, 2004.

She said that one letter states that U.S. EPA's comments on the Work Plan for the Pre-Design Investigation of Natural Attenuation for Site 16 have been adequately addressed and there are no further comments at this time. The comments related primarily to coordinating work conducted under the Petroleum Corrective Action Program with the on-going CERCLA work at the site.

Ms. Moutoux said she also provided a letter containing comments on the Draft Final Remedial Design for Landfill Sites 2 and 17. Comments address areas in the report that have been revised and have not been previously reviewed and commented upon by U.S. EPA. Major comments concerned the borrow soil source requirements and the hydraulic conductivity of the soil and if it is suitable for sustaining coastal sage scrub or native grasses. Also, a concern expressed is if there is a sufficient amount of soil from the borrow source to construct the landfill covers. She said that U.S. EPA concurred that residual radium-226 is at about 3 pico Curies per gram (pCi/g) as reported in the Radiological Release Report and that this will likely pose little or no lifetime cancer risk to humans when capped with 4 feet of clean soil. However, to ensure that residual radiation above 3.0 pCi/g does not occur at the surface, U.S. EPA requested that the design be revised to include screening of the areas previously unsurveyed below the excavation areas and of the excavated material at both sites.

She added that the design for the Irvine Desalter Project and cleanup of groundwater is very close to being completed. The agencies are working with the Navy to make sure that monitoring and

extraction wells are correctly placed to contain, treat, and monitor the plume of TCE-contaminated groundwater

Ms Moutoux said that this will likely be her last MCAS El Toro RAB meeting since she is moving on to another project.

Tayseer Mahmoud, Project Manager, Cal/EPA Dept. of Toxic Substances Control (DTSC)

Mr. Mahmoud stated that in the last two months DTSC's main focus has been on the review of the Draft Final Remedial Design for landfill Sites 2 and 17 and responses to comments, and on Draft 90 Percent Design Submittal for the Shallow Groundwater Unit remedial action for Site 24, Volatile Organic Compounds Source Area at Former MCAS El Toro. DTSC's general comments on the Sites 2 and 17 report were that the Final Remedial Design Report should be certified by a California Registered Professional Civil Engineer, a Construction Quality Assurance Program should be developed, and that the two sets of construction specifications (Site 2 and Site 17) be combined into one specification that applies to both sites. For the Shallow Groundwater Unit remedial action, DTSC asked for more details about the four proposed new multi-level monitoring wells and the rationale for the location of each well. The agency suggested that more monitoring wells are needed to evaluate the remediation at the southwest corner of the base.

Mr. Mahmoud said DTSC also provided comments on a Site Assessment Workplan for Temporary Accumulation Areas (TAAs) 2, 51, 115, 297, 388A, 388B, 634, 671, 672, and Solid Waste Management Units (SWMUs) 43 and 89. DTSC's review of the workplan resulted in providing numerous suggestions for improving the investigation at these sites.

DTSC also concurs with the Navy's No Further Action recommendation at Aerial Photograph Anomalies (APHOs) 84, 88, and 121 and TAAs 606, 673, and 698. Letters on the table confirm DTSC's concurrence. DTSC also approved the closure report for TAAs 605, 658, and 779; these units should be identified as "closed" and suitable for residential uses.

◆ Radiological Release Reports – Sites 2 and 17 and Site 8 (Units 2, 3, and 5) Site 12 and Portions of Site 25 (Bee Canyon Wash Outfall), Bruce Christensen, Weston Solutions, Inc.

Mr. Piszkin introduced Mr. Christensen and said that he has been working on the MCAS El Toro radiological release project for a number of years. Mr. Christensen confirmed that he started the radiological assessment in 1998, and that Weston Solutions was formerly known as Roy F. Weston, Inc.

Radiological Release Reports – Sites 2 and 17

The focus of tonight's presentation on Sites 2 and 17, including Aerial Photo Anomaly (APHO) 44, is to present the status of the Radiological Release Report, a summary of surveys and sampling, a summary of the results, conclusions and recommendations, and the restricted radiological release status.

Mr. Christensen said he would attempt to address Ms. Rudolph's questions as he does the

presentation. In regard to Ms. Rudolph's comment and questions from other RAB members on "background," in 2001, six background samples were taken, two from off-Station and four from on-Station areas. After the evaluation, it seemed lower than what was expected, but background was determined to be 0.9 pCi/g. When the Radiological Release Report supplement was done in 2004, additional background sampling was conducted, with samples collected from three areas north of Irvine Boulevard along with six additional on-Station areas. A new background number of 1.05 pCi/g was established. This is more typical and representative of background since it is based on 15 background samples from diverse locations, and it does represent the background at the station. This is also quite similar to Long Beach Naval Shipyard and Alameda Naval Air Station. The 1.05 pCi/g is very typical background of soil at bases in the state of California (See Discussion section following the presentation for additional responses to questions asked.)

The Radiological Release Report for Sites 2 and 17 and APHO 44 involved the following key steps: the Radiological Survey Plan, January 2001; Radiological Survey and Sampling conducted June-November 2001; Draft Radiological Release Report, June 2003; and the Final Radiological Release Report, August 2003.

The radiological survey involved taking nearly 2 million survey measurements at survey sites covering more than 30 acres. At Site 2, there were 1,507,241 survey measurements taken in 22.7 acres. At Site 17 and APHO 44, there were 466,810 survey measurements taken in 7.4 acres. In addition, 88 soil samples were collected and analyzed by a laboratory to fully characterize the survey sites. Of these, 31 samples were collected at Site 2 and 57 samples were collected at Site 17 and APHO 44. Mr. Christensen showed maps of both sites and areas sampled.

At Site 17, of the nine anomalies found eight were in one area that measured approximately 100 feet by 190 feet. The other anomaly consisted of only one sample. The rest of the samples were all at background readings. Overall, these were still below the established release limit for restricted use. Mr. Christensen explained that a pico Curie is a trillionth of a Curie, so it's pretty small. In 2001, the background was determined to be 0.9 pico Curies per gram (pCi/g) of radium-226. The restricted release concentration was determined to be background of 0.9 pCi/g plus 3.0 pCi/g; therefore it is 3.9 pCi/g. Mr. Christensen explained that the 3.0 pCi/g level is a result of discussions with the Navy and the regulators. As a comparison, the number for radium used for mill tailings at uranium mines was 5.0 pCi/g. This standard has been in place for over 50 years since the beginning of uranium mining. With base closures, a level discernable from background was necessary, so that is why the 3.9 pCi/g became the established release limit for a restricted release. He added that for a site that is capped, the 3.9 pCi/g does not pose a health problem.

Mr. Christensen said that the average of the survey measurements for each survey site was less than the established release limit of 3.9 pCi/g. At Site 2, the average survey measurement was 1 pCi/g and at Site 17/APHO 44 it was 0.96 pCi/g. The average of the sample concentration for each survey site was also less than the 3.9 pCi/g established release limit. At Site 2, it was 1.12 pCi/g; and at Site 17/APHO 44 it was 3.33 pCi/g.

Based on survey and sampling results, dose modeling was performed to determine the total effective dose equivalent of radium-226 for the critical group for each survey site. The critical group was based on a default scenario of "residential." Concentrations from the survey and sampling results were placed into the dose modeling program and the results were as follows. For Site 2, the result

was 1.04 millirems per year (mrem/y) on average radium-226 concentration of 0.22 pCi/g above the Station background. For Site 17/APHO 44, the result was 11.5 mrem/y based on average radium-226 incremental concentration of 2.43 pCi/g above Station background. Therefore, the recommendation for Sites 2 and 17, including APHO 44, is to release these sites for restricted use. With these results, both the Nuclear Regulatory Commission (NRC) limit and U.S. EPA limits are met. In addition, these results show that there is not a health problem, and this is before the 4-foot thick cap is placed on the landfills. With the 4-foot cap, any risk to human health virtually disappears. Recommendations include proceeding with the consolidation and capping of Sites 2 and 17 and APHO 44.

Radiological Release Reports – Site 8 (Units 2, 3, and 5) Site 12 and Portions of Site 25 (Bee Canyon Wash Outfall)

Mr. Christensen said that the next report is a stand-alone document – Radiological Release Report for Site 8 (Units 2, 3, 5); Site 12 (Units 1-4); and Site 25 (Bee Canyon Wash Outfall), which is downstream from Site 12. The process for these is as follows: the Radiological Survey Plan, January 2001; Radiological Survey and Sampling conducted June-November 2001; Radiological Sampling Amendment, February 2004; Perform Additional Radiological Survey and Sampling, March 2004; Draft Radiological Release Report, July 2004; and the Final Radiological Release Report, October 2004.

Mr. Christensen said that all surveys were conducted and samples obtained following BRAC Cleanup Team approved work plans. The high density surveys conducted took more than 770,000 survey measurements in an area covering more than 10.7 acres. Specifically, at Site 8 there were 341,391 survey measurements taken over 5.37 acres; at Site 12, there were 429,054 survey measurements taken over 5.38 acres, and at Site 25, there were 50 survey measurements taken over 108 square feet. A total of 75 soil samples were collected and analyzed by a laboratory to fully characterize the survey sites: 32 samples at Site 8; 22 samples at Site 12; and 21 samples at Site 25. He said that Site 25 was very challenging to sample over and around boulders but the effort was accomplished.

Mr. Christensen summarized results from the surveys and sampling efforts. The average of the survey measurements for each survey site was less than the established release limit of 2.05 pCi/g. The established release limit was determined by using the 2004 Station background of 1.05 pCi/g of radium-226 plus 1 pCi/g (release limit). Specific results were as follows: at Site 8, 1.08 pCi/g; at Site 12 1.00 pCi/g; and at Site 25, 1.07 pCi/g. All readings at the site were below the established release limit. Of the soil samples, all were less than background, except for one that was slightly above background: 0.9 pCi/g at Site 8; 1.16 pCi/g at Site 12; and 0.9 pCi/g at Site 25.

Based on survey and sampling results, dose modeling was performed to determine the total effective does equivalent of radium-226 for the critical group for each survey site. The critical group was based on a default scenario of “residential.” Concentrations from the survey and sampling results were placed into the dose modeling program and the results were as follows. For Sites 8 and 25, the result was zero doses based on an average radium-226 concentration of 0.9 pCi/g which is below the Station background of 1.05 pCi/g. For Site 12, the result was 4.7 mrem/y based on average radium-226 incremental concentration of 0.11 pCi/g above Station background. Therefore, the recommendation for Sites 8, 12 and 25 is to delete radionuclides from the list of constituents of

potential concern and to release the sites, from a radiological perspective, for unrestricted residential use.

Mr. Christensen said that the regulatory agency and public reviews of the Draft Radiological Release Report have resulted in no comments. The next step is to issue the Final Radiological Release Report.

Discussion

Mr. Christensen said that in regard to using the supplemental Radiological Release Report for Sites 2 and 17, this did not detract from the content of the document. It contains all the information and a thorough summary of that analysis and the supporting information. A separate report would contain the same information.

Mr. Ray Ouellette, RAB attendee, said that the title stating the "Sites 2 and 17 - 90 Percent Remedial Design" has nothing to do with the radiological issues. The radiological release information is buried in the report. C. Wanyoike, Earth Tech, said a draft report was submitted for comments, and the version that addressed comments was included in the remedial design report because it is part of the remedial design. Mr. Ouellette asked if the radiological report was released to the public as a stand-alone document. He added that the point is that this should be stand-alone document so someone can find it in a document search. Ms. Moutoux said it should have been issued separately as well. Ms. Content Arnold, Navy/SWDIV Lead RPM, said that the RAB received the document via the Community Co-Chair and the RAB Subcommittee Chair, and it was listed as an appendix in the 90 Percent Remedial Design document. Mr. Ouellette said it does not stand out enough. Mr. Piszkin said that all the other Radiological Release Reports are stand-alone documents.

Mr. Christensen said the other questions raised pertained to things that we struggled with. When soil from an anomaly is removed the soil is analyzed to make sure we did not leave something behind. At Site 17, investigators went back and resurveyed the point where the anomaly was removed, and the survey was more conservative than the scans done for a typical survey. A stationary survey device is used and it provides a better indication than a survey unit that moves across the soil at a steady rate. Every single anomaly removed was resurveyed and given a clean bill of health. Additionally, all sample points where samples were removed were resurveyed as well.

Mr. Ouellette asked about the anomalies. What were the anomalies and what levels of radiation are you talking about? Also, when the area was analyzed was it determined where the radiological materials came from? He added that the RAB has always been under the impression that these sites were not used for dumping of radiological material. Also, if the survey equipment only detects to a depth of 18 inches, what leads investigators to conclude that nothing remains after the excavation?

Mr. Christensen said that what was found were just small metallic particles and not gauges or instruments and these particles are very difficult to see. In many instances, all that could be detected was a rock or soil, and something that flaked off onto these. All but one anomaly were removed from areas measuring 10 feet by 10 feet and this is within an area totaling about 7 acres. He added that only radium-226 was found. In the past, radium was used in watches sold over the counter and watches could end up in a landfill. Finding radium in a landfill is not nearly a concern as finding enriched uranium. He reiterated that it is not surprising to find radium in a landfill. Also, the

amounts of radium are not at levels that are dangerous, these are the same levels found in a watch.

Dr. Brown asked how a 4.7 millirem per year (mrem/y) dose equates in relation to incremental risk. If one resides at a site that gets a 4.7 mrem/y dose what does this mean? Mr. Christensen said that dose takes the risk down to 8 or 9 to 10^{-6} range. Also, in the 10^{-6} to 10^{-4} range, the risk would fall into the lower third of that range. Dr. Brown said that anything higher than 10^{-6} creates an issue in terms of a residential project, and that the incremental risk is above the background.

Mr. Ouellette asked how many millirems occur above background here. Mr. Christensen said soil concentrations are at 20 to 25 mrem/y and that 1 pCi/g per year is 20 to 25 mrem/y. He added that at previous RAB meetings, it was explained that people are typically exposed to about 300 mrem/y and about 2/3 of this is from sun, and the rest is from radioactive materials present in concrete and soil. Other substances contain radium, for example, bananas contain radium potassium.

Mr. Fred Meier, RAB member, asked how a pico Curie is measured. Mr. Christensen said the most accurate method is a high density scan in a laboratory. This is used on the samples pulled from the ground and it "counts" in all directions and is very accurate. He added that the solid sample results nearly duplicated the survey results. He explained that the different survey carts are fitted with various detectors and can have two, six and ten detectors and run several scans at the same time. The science behind this is the reason it is so expensive to purchase and operate this survey equipment.

◆ **Indoor Overview of Remedial Investigation Activities for Site 1, Gordon Brown, Remedial Project Manager, SWDIV and Chris Cavers, Earth Tech, Inc.**

Mr. Gordon Brown introduced Mr. Chris Cavers. He noted that Chris works on a daily basis for the investigation at Site 1. He briefly described the three basic portions of the project: 1) ordnance explosives (OE) scrap removal; installation of 20 groundwater wells; and 3) the investigation of the ephemeral pond.

Mr. Cavers briefly explained some of the background information pertaining to Site 1 which consists of approximately 74 acres of which 33.5 acres makes up the center portion of the site where explosives ordnance disposal (EOD) training took place for more than 40 years from approximately 1953 to 1999. The EOD range is divided into the Northern and Southern ranges. The Northern EOD range was used by the military while the Southern EOD range was used by the FBI and Orange County Law Enforcement. Munitions used in training activities included: cartridge-actuated devices and ammunition and hand grenades and land mines. The ephemeral pond area is located in the northern-most portion of the Northern range.

Mr. Brown explained that the Navy contracted with Shaw Environmental for the demilitarization (demil) of OE and unexploded ordnance (UXO). Scrap removal was done simultaneously with the demil activities. This work was performed this past summer. Photos of scrap metal and munitions and explosives of concern (MEC) were shown. This process is very tightly governed in terms of security and safety. The demil process makes sure that anything that was ordnance or munitions does not any longer resemble ordnance or munitions. A horizontal band saw was used to destroy these materials. This was performed with the highest safety measures taken. It is so tightly governed such that the use of torches to cut up munitions is no longer allowed to prevent against possible

explosion and the loss of life. He noted that there are three items awaiting detonation at the site. The rest of materials will be removed from the site for proper disposal.

Ms. Rudolph said she remembers that at Site 1 there were areas dug into the sides of the hills. She inquired if demolition activities occurred in those locations. Mr. Brown explained that these were old munitions bunkers and they have been filled in with dirt and refuse. He added that what she is referring to could be an actual observation bunker that was constructed to protect those observing training and detonation activities.

Mr. Cavers discussed the groundwater investigation which took a tiered approach and described the key tiers. Tier 1 (January 2002) involved the sampling of 12 groundwater wells to establish baseline groundwater conditions. Sampling indicated the presence of perchlorate in groundwater. For Tier III-A (June 2002), three new groundwater wells were installed east, south and southwest of the main perchlorate concentrations to further delineate perchlorate in groundwater. Sampling included the three new wells and five existing wells. Tier III-B (February 2003) focused on installing 16 piezometers (2-inch monitoring wells) at various locations throughout Site 1 and south of Site 1 to further delineate perchlorate in groundwater. Four rounds of sampling were conducted on 16 piezometers and eight groundwater wells. Additional lithological information was needed in order to design an aquifer test and a treatability study for the perchlorate in the groundwater.

Surface to borehole seismic surveys were conducted to assess whether there are fracture zones or subsurface conditions influencing groundwater flow at Site 1. These surveys also were performed to evaluate if there was a need to change the placement of additional monitoring wells. The method measures the movement of waves through soil by hitting an aluminum plate with a sledgehammer. Waves are measured using hydrophones located at different distances from the wave source which are connected to a seismograph. This was conducted at six wells at Site 1. Results did not indicate fracture zones, or the need to change the placement of monitoring wells.

Mr. Cavers explained that Tier III-C was conducted and involved the installation of 12 additional groundwater monitoring wells. All of these wells were installed to gather more data to further delineate perchlorate in groundwater at Site 1. Another purpose is to further evaluate the possible link between perchlorate concentrations at Site 1 and Site 2. Preliminary results from the additional lithologic information obtained indicated: the subsurface is predominantly sandstone with no apparent fractures; and there are zones of varying moisture levels. Lithologic interpretations are in progress.

Site 1 Ephemeral Pond

The ephemeral pond is located in the northern-most portion of the site. It is a bermed retention pond that was constructed around 1980. It is thought that the berm was constructed to prevent sheet flow flooding from precipitation events. It is essentially a natural depression with a bermed area around it. No ponding or accumulation of water has contributed to surface water flow since 1999. A field survey in early 1998 identified four adult Riverside fairy shrimp, a federally endangered species, in the pond.

Mr. Cavers explained that a Final Phase II Remedial Investigation Work Plan was completed and submitted for regulatory agency review in November 2001. It was developed based on geophysical

survey that included the pond area. No soil chemical sampling was proposed due to the absence of significant anomalies in the pond. Surface water chemical sampling was proposed, but there was no surface water present to sample. A Screening Ecological Risk Assessment (SERA) was conducted using soil data collected during previous remedial investigation activities and was submitted to the agencies. Subsequent to the SERA, discussions were held among the Navy, U.S. Fish and Wildlife Service, U.S. EPA, Cal/EPA DTSC, and the Regional Water Quality Control Board, Santa Ana Region. The agencies requested soil and sediment sampling in the pond area to assess if past EOD activities have negatively impacted the Riverside fairy shrimp. The Navy agreed to conduct the sampling.

This has been a long process that next saw the submittal of the Draft Work Plan Amendment No. 1 to the regulatory agencies in November 2002. Comments on this document were received in December 2002. The draft Final Sampling and Analysis Amendment was submitted to the regulatory agencies in March 2004; comments were received in May 2004 followed by additional comments in August 2004 related to risk-based screening values. Comments have been incorporated and the Navy is awaiting regulatory concurrence on final responses.

The final sampling plan calls for the collection of dry sediments from three locations at the two geophysical anomalies and the lowest portion of the pond. Final plan is to collect dry sediment from three locations; two are geophysical anomalies in the pond area and the third area the lowest area of the pond at the surface and at depths up to 5 feet below the ground surface depending on the depth of the anomalies. Sampling will also be done just below the anomalies as well. VOCs, SVOCs, metals, and perchlorates will be analyzed. Thirteen random locations will be sampled using a grid system and samples will be collected from the center of the grid. Also, four composite surface samples will be collected from each grid and composited into a single sample for analysis.

Mr. Cavers reviewed the schedule of major milestones. For the EOD pond evaluation, the final SAP Amendment will be issued in October 2004; and sampling is planned for November 2004. For the perchlorate delineation, the groundwater sampling summary memorandum is planned for issuance in November 2004. The treatability schedule calls for the draft work plan in November 2004, the final work plan in February 2005, and implementation of the treatability study in February-August 2005. For the RI Report, the draft is scheduled for issuance in March 2005, the draft FS Report in December 2005, the draft Proposed Plan in May 2006, and the draft Record of Decision in November 2006.

Discussion

Ms. Rudolph asked about the fairy shrimp and the pond. She inquired how investigators plan not to disturb the area when sampling. Mr. Cavers said a permitted biologist from the U.S. Fish and Wildlife Service would be on-site to monitor sampling activities. He said only two people would be allowed in the pond area. If the ground is moist, investigators will have plans to minimize activities in the mud.

♦ Open Q & A -- Environmental Topics

Mr. Piszkin opened up the session, but there were no questions asked.

MEETING EVALUATION AND FUTURE TOPICS

Meeting evaluation by RAB members:

RAB members did not offer an evaluation of this meeting.

Suggestions for future presentation topics include:

- An update on the California gnatcatcher and coastal sage at Sites 2 and 17. Mr. Piszkin said a presentation would be made only if there is something new to offer. Ms. Rudolph requested a presentation update and background information.
- A status update on the FOST and FOSL and what is going on with property transfer. (Mr. Piszkin said that the FOST was signed on August 3, 2004 and the next FOST will be issued a year from now and include carve out properties.)
- An update on the storm water NPDES issue. Ms. Arnold said at MCAS El Toro this is no longer an issue, but the Navy would look into this. Mr. Woodings was curious if this falls under the responsibility of Orange County.
- Ms. Rudolph said runoff issues associated with remedial actions on the base are a concern of the RAB and a presentation would be of interest.
- Mr. Piszkin said he would look into other issues that may be pertinent for our December 2004 meeting.

Upcoming RAB Meeting and Subcommittee Meeting

The next RAB meeting will be held from 6:30 to 9 p.m., December 1, 2004 in the regular meeting location, Irvine City Hall, Conference and Training Center (CTC), One Civic Center Plaza, Irvine. A RAB Subcommittee meeting will be held from 5 to 6 p.m., the same evening in Room L-104 at Irvine City Hall.

Recent RAB Subcommittee Meetings

The most recent RAB Subcommittee meeting was held Wednesday, September 29, 2004, in Room L-104, Irvine City Hall, before tonight's RAB meeting.

RAB Meeting Adjournment – September 29, 2004 Meeting

The 71st meeting of the MCAS El Toro Restoration Advisory Board was adjourned at 9:03 p.m.

9/29/04 RAB Meeting Attendance:

<u>TOTAL PEOPLE IN ATTENDANCE</u>	<u>TOTAL PEOPLE ON SIGN-IN SHEET</u>	<u>TOTAL RAB MEMBERS PRESENT</u>	<u>TOTAL RAB AGENCY MEMBERS PRESENT</u>	<u>TOTAL RAB COMMUNITY MEMBERS PRESENT</u>	<u>TOTAL EXCUSED ABSENCES RAB MEMBERS</u>	<u>EXCUSED ABSENCES – AGENCY RAB/ COMMUNITY RAB</u>
23	22	7	3	4	1	1/0

*

RAB and Subcommittee Meeting Schedule (December 2004 – July 2005)

RAB and Subcommittee Meeting Dates	RAB Meeting Conference and Training Center (CTC) 6:30 – 9:00 p.m.	Subcommittee Meeting Room L-104 5:00 – 6:00 p.m.
Wed., December 1, 2004	CTC	Room L-104
Wed., January 26, 2005	CTC	Room L-104
Wed., March 30, 2005	CTC	Room L-104
Wed., May 25, 2005	CTC	Room L-104
Wed., July 27, 2005	CTC	Room L-104

Additional Date Reserved: Wed., April 27, 2005

Materials/Handouts Include:

- *RAB Meeting Agenda/Public Notice 9/29/04 RAB meeting – 71st meeting.
- *Meeting Minutes from the July 28, 2004 RAB meeting – 70th Meeting
- MCAS El Toro RAB Meeting Schedule, Full RAB and RAB Subcommittee (July 2005 - July 2005).
- MCAS El Toro RAB Mission Statement and Operating Procedures
- RAB Membership Application – MCAS El Toro RAB.
- MCAS El Toro RAB Membership Roster (revised July 2004).
- MCAS El Toro Installation Restoration Program – Mailing List Coupon.
- MCAS El Toro – BRAC Cleanup Team Members and Key Project Representatives and Administrative Record File and Information Repository Locations and Contacts.
- Internet Access – Environmental Web Sites
- Internet Access – U.S. EPA Federal Register Environmental Documents – Endangered and Threatened Wildlife and Plants Proposed Designation of Critical Habitat for the Riverside Fairy Shrimp.
- One-Page Glossary of Technical Terms
- Department of Navy – Policy for Conducting Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) Statutory Five-Year Reviews, November 2001.
- Department of Defense – Institutional Controls, Spring 1997.
- Department of Defense – A Guide to Establishing Institutional Controls at Closing Military Installations, February 1998.
- Department of Defense – Memorandum - Responsibility for Additional Environmental Cleanup after Transfer of Real Property, 1997.
- U.S. EPA Fact Sheet – A Citizen's Guide to Natural Attenuation, October 1996.
- Brochure – Commonly Asked Questions Regarding the Use of Natural Attenuation for Chlorinated Solvent Spills at Federal Facilities (Brochure developed through a partnership of U.S. EPA, Air Force, Army, Navy, and Coast Guard).

- U.S. EPA Fact Sheet – Checking Up on Superfund Sites: The Five-Year Review, June 2001
- U.S. EPA Fact Sheet – Perchlorate Update, March 2002
- Environmental Data Quality Handout – Response to RAB Inquiry, September 2003
- News Article from the *New York Times* News Service – “Toxic agents are not always a hazard” by Jane E. Brody, dated July 21, 2004
- *Presentation* – Status of Restricted Radiological Release for IRP Sites 2 and 17 (Including APHO 44), presented by Weston Solutions, Inc., Mare Islands Office, for the September 29, 2004 Restoration Advisory Board Meeting for Former MCAS El Toro.
- *Presentation* – IRP Site 1 Remedial Investigation Update by Gordon Brown NFECSW and Chris Cavers, Earth Tech, Inc., at the September 29, 2004 Restoration Advisory Board Meeting for Former MCAS El Toro.

* Mailed to all RAB meeting mailer recipients on 9/16/04

Agency Comments and Letters - U.S. Environmental Protection Agency (U.S. EPA)

- U.S. EPA, Draft Final Work Plan Pre-Design Investigation of Natural Attenuation at IRP Site 16, Former Marine Corps Air Station El Toro, CA, dated July 2004, To: Andrew Piszkin, BEC, MCAS El Toro; From: Nicole Moutoux, Project Manager U.S. EPA (letter dated August 5, 2004)
- U.S. EPA, EPA Review and comments on Draft Final Remedial Design for OU-2B, Landfill Sites 2 and 17, Former Marine Corps Air Station El Toro, CA, dated July 2004, To: Andrew Piszkin, BEC, MCAS El Toro; From: Nicole Moutoux, Project Manager U.S. EPA (letter dated August 31, 2004).

Agency Comments and Letters – California Environmental Protection Agency (Cal-EPA)

- Cal-EPA, Department of Toxic Substances Control (DTSC) – Comments on 90% Design Submittal, Shallow Groundwater Unit Remedial Action, IRP Site 24, Volatile Organic Compounds Source Area, Former Marine Corps Air Station (MCAS) El Toro; To: Andrew Piszkin, BEC, MCAS El Toro, From: Tayseer Mahmoud, Senior Hazardous Substances Engineer, DTSC (letter dated August 2, 2004).
- Cal-EPA, DTSC- Summary Report for Aerial Photograph Anomaly (APHO) 121, Former Marine Corps Air Station (MCAS) El Toro, To: Andrew Piszkin, BEC, MCAS El Toro, From: Tayseer Mahmoud, Senior Hazardous Substances Engineer, DTSC (letter dated August 17, 2004).
- Cal-EPA, DTSC- Approval of Addendum Closure Report for Temporary Accumulation Area (TAA) 658, Former Marine Corps Air Station (MCAS) El Toro, To: Andrew Piszkin, BEC, MCAS El Toro, From: Tayseer Mahmoud, Senior Hazardous Substances Engineer, DTSC (letter dated September 1, 2004).
- Cal-EPA, DTSC- Approval of Addendum to Closure Report for Temporary Accumulation Area (TAA) 779, Former Marine Corps Air Station (MCAS) El Toro, To: Andrew Piszkin, BEC, MCAS El Toro, From: Tayseer Mahmoud, Senior Hazardous Substances Engineer, DTSC (letter dated September 7, 2004).
- Cal-EPA, DTSC- Approval of Closure Report for Temporary Accumulation Area (TAA) 605, Former Marine Corps Air Station (MCAS) El Toro, To: Andrew Piszkin, BEC, MCAS El Toro, From: Tayseer Mahmoud, Senior Hazardous Substances Engineer, DTSC (letter dated September 13, 2004).
- Cal-EPA, DTSC- Comments on Draft Final Remedial Design Submittal for Operable Unit 2B, Landfill Sites 2 and 17, Former Marine Corps Air Station (MCAS) El Toro, To: Andrew Piszkin, BEC, MCAS El Toro, From: Tayseer Mahmoud, Senior Hazardous Substances Engineer, DTSC (letter dated September 15, 2004)
- Cal-EPA, DTSC- Approval of Closure Report for Temporary Accumulation Area (TAA) 606, Former Marine Corps Air Station (MCAS) El Toro, To: Andrew Piszkin, BEC, MCAS El Toro, From: Tayseer Mahmoud, Senior Hazardous Substances Engineer, DTSC (letter dated September 16, 2004)
- Cal-EPA, DTSC- Comments on Site Assessment Workplan for Temporary Accumulation Areas (TAAs) 2, 51, 115, 297, 388A, 388B, 634, 671, 672, and Solid Waste Management Unit (SWMU) 43 and 89, Former Marine Corps Air Station (MCAS) El Toro, To: Andrew Piszkin, BEC, MCAS El Toro, From: Tayseer Mahmoud, Senior Hazardous Substances Engineer, DTSC (letter dated September 22, 2004).
- Cal-EPA, DTSC- Summary Report for Aerial Photograph Anomaly (APHO) 84 and 88, Former Marine Corps Air Station (MCAS) El Toro, To: Andrew Piszkin, BEC, MCAS El Toro, From: Tayseer Mahmoud, Senior Hazardous Substances Engineer, DTSC (letter dated September 24, 2004)

- Cal-EPA, DTSC- Approval of Closure Report for Temporary Accumulation Area (TAA) 673, Former Marine Corps Air Station (MCAS) El Toro, To: Andrew Piszkin, BEC, MCAS El Toro, From: Tayseer Mahmoud, Senior Hazardous Substances Engineer, DTSC (letter dated September 24, 2004).
- Cal-EPA, DTSC- Comments on Summary Report for Temporary Accumulation Area (TAA) 371B, Former Marine Corps Air Station (MCAS) El Toro, To: Andrew Piszkin, BEC, MCAS El Toro, From: Tayseer Mahmoud, Senior Hazardous Substances Engineer, DTSC (letter dated September 28, 2004).
- Cal-EPA, DTSC- Approval of Closure Report for Temporary Accumulation Area (TAA) 698, Former Marine Corps Air Station (MCAS) El Toro, To: Andrew Piszkin, BEC, MCAS El Toro, From: Tayseer Mahmoud, Senior Hazardous Substances Engineer, DTSC (letter dated September 28, 2004).

California Regional Water Quality Control Board (RWQCB), Santa Ana Region

- No Items Submitted

RAB Subcommittee Handouts and Letters *(generally provided by Marcia Rudolph, MCAS El Toro RAB Subcommittee Chair)*

- No Items Submitted

Additional Information Submitted – 9/29/04 RAB Meeting

- No Items Submitted

Copies of all past RAB meeting minutes and handouts are available at the MCAS El Toro Information Repository, located at the Heritage Park Regional Library in Irvine. The address is 14361 Yale Avenue, Irvine; the telephone number is (949) 551-7151. Library hours are Monday through Thursday, 10 am to 9 p.m.; Friday and Saturday, 10 am to 5 p.m.; Sunday 12 p.m. to 5 p.m.

Internet Sites

*Navy and Marine Corps Internet Access
Naval Facilities Engineering Command, Southwest Division, Environmental Web Sites
(includes RAB meeting minutes):*

www.efdswn.navy.mil/environmental/envhome.htm

www.efdswn.navy.mil/environmental/ElToro.htm

Department of Defense – Environmental Cleanup Home Page Web Site:

<http://www.dtic.mil/envirodod/>

U.S. EPA:

www.epa.gov (this is the homepage)

www.epa.gov/superfund (site for Superfund)

www.epa.gov/ncea (site for National Center for Environmental Assessment)

www.epa.gov/federalregister (site for Federal Register Environmental Documents)

www.epa.gov/fedrgstr/EPA-IMPACT/2004/April/Day-27/i9203.htm (site for Endangered and Threatened Wildlife and Plants; Proposed Designation of Critical Habitat for the Riverside fairy shrimp)

Cal/EPA:

www.calepa.ca.gov (this is the homepage)

www.dtsc.ca.gov (site for Department of Toxic Substances Control)

www.swrcb.ca.gov/ (site for Santa Ana Regional Water Quality Control Board)

Meeting Minutes 9/29/04 MCAS El Toro RAB Meeting

MCAS EL TORO
RESTORATION ADVISORY BOARD MEETING
September 29, 2004

RAB MEMBER SIGN-IN SHEET

Name	Signature	Name	Signature
Bell, Richard		Marquis, Suzanne	
Broderick, John	EAB	Matheis, Mary Aileen	
Crompton, Chris		Meier, Fred J.	<i>Fred J. Meier</i>
Hendon, Roy		Piszkin, Andy - Co-Chair	<i>A. Piszkin</i>
Hersh, Peter		Reavis, Gail	
Hurley, Greg	<i>Greg Hurley</i>	Rudolph, Marcia	<i>Marcia Rudolph</i>
Jung, Dan		Sharp, Steven	
Mahmoud, Tayseer		Werner, Jerry	
Malloy, Steve	<i>Steve Malloy</i>	Woodings, Bob - Co-Chair	<i>Bob</i>
Moutoux, Nicole	<i>Nicole Moutoux</i>	Zweifel, Donald E.	
Marquis, Roland			

EAB = Excused Absence

New Attendees
will be added
to the MCAS
El Toro
Mailing List.

MCAS EL TORO
RESTORATION ADVISORY BOARD MEETING
September 29, 2004
NON-RAB MEMBER SIGN-IN SHEET
Other Attendees, Guests

NAME <u>PLEASE PRINT CLEARLY</u>	AFFILIATION	COMPLETE MAILING ADDRESS (STREET NUMBER, STREET NAME, CITY, STATE, ZIP CODE)	PHONE FAX	INTERESTED IN RAB MEMBERSHIP.
Dhananjay Rawal		24282 Sunnybrook Circle Lark Forest, CA 92630	949-443-6486 949-770-2331	N
Paul Hryzel		16183 MTLOWA FV CAL 922708	714-7755132 714-7755132	N
JIM PARRETT	EARTH TECH, INC.	9475 BUSINESS PARK AVE SAN DIEGO, CA 92131-1651	858.534.5610	
CHRIS CAVERS	EARTH TECH	300 OCEANGate Long Beach CA 90802	562-951-2060	
Karnig Channession	Navy	1230 Columbia St #870 San Diego 92101	619-532-0796	
Frank Cheng	DTSC		714-484-5395	

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MCAS EL TORO
RESTORATION ADVISORY BOARD MEETING
September 29, 2004
NON-RAB MEMBER SIGN-IN SHEET
Other Attendees, Guests

NAME <u>PLEASE PRINT CLEARLY</u>	AFFILIATION	COMPLETE MAILING ADDRESS (STREET NUMBER, STREET NAME, CITY, STATE, ZIP CODE)	PHONE FAX	INTERESTED IN RAB MEMBERSHIP?
Crispin Wansbire	EARTH TECH	300 Ocean Gate Suite 700 Long Beach CA	951 2057	
Michael Brown	CoI			
Bruce Christensen	Western	388 Seawind Dr Vallejo, CA 94590		
CHRIS PARR	EARTH TECH			
Bob Coleman	Brown + Caldwell NoyComm Relations			

New Attendees
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MCAS EL TORO
RESTORATION ADVISORY BOARD MEETING
September 29, 2004
NON-RAB MEMBER SIGN-IN SHEET
Other Attendees, Guests

NAME <u>PLEASE PRINT CLEARLY</u>	AFFILIATION	COMPLETE MAILING ADDRESS [STREET NUMBER, STREET NAME, CITY, STATE, ZIP CODE]	PHONE FAX	INTERESTED IN RAB MEMBERSHIP:
Hsien Chen	Earth Tech	300 Ocean Gate Suite 700 Long Beach CA 90802	562-951-2065	
Julie Dubocour	AIG	777 South Figueroa 18th Floor Los Angeles CA 90017	213 689 3741	
Dave Dinkid	ESCI	LAKE FOREST 18915 Vista Portola Portola Hills CA 92674	—	No

New Attendees
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to the MCAS
El Toro
Mailing List.

MCAS EL TORO
RESTORATION ADVISORY BOARD MEETING
September 29, 2004
NON-RAB MEMBER SIGN-IN SHEET
Other Attendees, Guests

NAME <u>PLEASE PRINT CLEARLY</u>	AFFILIATION	COMPLETE MAILING ADDRESS [STREET NUMBER, STREET NAME, CITY, STATE, ZIP CODE]	PHONE FAX	INTERESTED IN RAB MEMBERSHIP.
Raymond E. Queltche	Resident Mission Vizio			

